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Determinants of Hotel Guests' Continued Use of Social Media

Abstract

Purpose

With the emergence of mobile devices, factors such as interaction and ubiquity have become increasingly important in the use of social media networks. However, regarding hotel guests' use of social media, knowledge about how those factors contribute to guests' continued social media use remains limited. In response, this study aimed to examine the influence of interaction and ubiquity mediated by trust, benefits, and enjoyment on hotel guests' continued use of social media networks.

Design/methodology/approach

To examine the hypotheses, a self-administered questionnaire was posted by 10 UK hotels on their social media pages. A total of 258 usable data were collected and analyzed using partial least squares analysis.

Findings

Two social media characteristics—interaction and ubiquity—influenced hotel guests' continued use of social media via the mediating variables of trust, benefits, and enjoyment.

Originality/value

This study bridges the gap in research regarding intended continued use of social media networks by offering new empirical evidence concerning the determinants of hotel guests' continued use of social media.

Keywords

Interaction, ubiquity, continued use, social media, hotel industry

Introduction

The emergence of Web 2.0 has transformed the way in which people communicate, share experiences, and search for information about traveling (Ayeh *et al.*, 2013a), as well as increased the use of social media networks before, during, and after travel. Minazzi (2015, p. 12) has defined *social media networks* as “websites that allow subscribers to connect and interact with other people . . . [which] creates a group of people who share information and content.” In effect, social media networks allow users to engage with businesses and other users anywhere and at any time.

This trend of interaction and ubiquity poses considerable implications for future online marketing strategies in the hotel industry. On the one hand, the increased significance of interaction on social media can generate ever-new technologies that enable users to interact anywhere and at any time (Lee, 2005). On the other hand, regarding ubiquity, today’s hotel guests can access information about hotels whenever they want and regardless of their location (Kim *et al.*, 2008b). Together, interaction and ubiquity are thus important constructs for the continued use of social media networks among hotel guests.

Continued use relates to consumers’ behavior and their intentions to use information technologies (IT) after their initial adoption (Chang, 2013). However, research on the determinants of the continued use of social media in the hotel context remains limited. Chuttur (2009) has revealed a clear gap in literature on intended continued use of social media. More recently, Lin *et al.* (2014), who studied social media using Bagozzi’s self-regulation framework, found that individuals form opinions about situations and, based on positive or negative feelings, decide to either continue or discontinue using products or services.

Berezina *et al.* (2016) stressed the importance of the continued use of social media in the hotel industry by revealing that acquiring new customers is more expensive than retaining existing ones. As such, traditional research on intended use can be considered of limited value and should be replaced with research on intended continued use to explore how social media channels can be used to retain existing hotel guests. The importance of continued use in the tourism context was confirmed by Escobar–Rodríguez and Carvajal–Trujillo (2014), who focused on airline ticket purchases, as well as Chung *et al.* (2015), who studied destination websites and visit intentions. The latter study especially confirmed the significance of adequate website design in order to continue to attract tourists to hotel websites, which ultimately boosts visit intentions.

Numerous researchers have integrated interaction and ubiquity into their studies on the adoption of technology to investigate users’ behavioral intentions in using new technologies. Research on the effects of interactions on behavioral intentions has addressed various contexts, including social media networks (Wirtz *et al.*, 2013), social media games (Chang, 2013), and electronic learning systems (Agudo–Peregrina *et al.* 2014; Liu *et al.*, 2010). Interaction is clearly crucial for hotels, considering the importance of customer relationships with management in order to attract and retain guests. Therefore, hotels have found it essential to create dialogues with customers online, as well as to foster positive word-of-mouth among guests, in order to create long-lasting relationships (Baird and Parasnis, 2011), all of which clearly relates to interaction and intended continued use of social media.

Numerous scholars have investigated the effects of ubiquity on behavioral intentions to use mobile services (Kim *et al.*, 2008c; Lee *et al.*, 2015; Mallat *et al.*, 2009), social network games (Park *et al.*, 2014), and mobile payment and banking services (Schierz *et al.*, 2010; Zhou, 2012). In the hospitality context, tom Dieck *et al.* (2017) confirmed the importance of accessing information anywhere and at any time, which they referred to as *accessibility*, a concept related to ubiquity. Furthermore, several scholars have studied social media networks and their acceptance in the hospitality context using the technology acceptance model as a theoretical foundation (Kim, 2016; tom Dieck *et al.*, 2017). However, theoretical models integrating interaction and ubiquity to study hotel guests' intentions to continue to use social media networks remain scarce. Therefore, the present study aimed to examine whether interaction and ubiquity are key determinants to predict the continued use of social media in the hotel context.

Literature Review and Conceptual Model

Social media in the hotel industry

The increased importance of social media networks for the hotel industry has been acknowledged by numerous researchers (Fotis *et al.*, 2012; Hudson and Thal, 2013; Jung *et al.*, 2013). In essence, social media networks are online platforms that allow users and businesses to generate, share, and comment on content and interact with other users (Kaplan and Haenlein, 2010). In the intangible hotel industry, social media networks, which facilitate the interaction of users and businesses, are exceptionally influential because hotel guests perceive word-of-mouth to rank among the most trustworthy sources of information (Ayeh *et al.*, 2013a). Moreover, social media networks are important tools for the acquisition and retention of hotel guests (Sigala, 2011). According to Palmer *et al.* (2000, p. 58), using innovative marketing approaches is pivotal for hotels for which “customisation is a customer expectation” and that have to offer highly tailored services to satisfy guests. King *et al.* (2011) further underscored the importance of engaging in social marketing strategies since hotels compete in a fiercely competitive environment and thus depend on innovative marketing strategies. The importance of social media for the hotel industry continues to increase with the high penetration of smartphones and tablets, which allow social media applications to be accessible anywhere and at any time (Yang and Kang, 2015).

Social media networks are among the Web 2.0 developments that have drastically changed the way in which hotels communicate with customers in more engaging, user-centric, and transparent modes of contact (Greenberg, 2010; Leung *et al.*, 2015). Given the high amount of uncertainty involved in purchasing products and services, hotel guests tend to refer to previous guests' reviews and experiences, meaning that consumer-generated content on social media is often trusted and perceived to ease uncertainty (Ayeh *et al.*, 2013a; Schmallegger and Carson, 2008). That trend makes social media networks highly important for the hotel industry, especially because more than half of today's hotel guests read reviews before booking a hotel room (Taylor *et al.* 2015). Leung *et al.* (2015) tested a marketing effectiveness model on Twitter and Facebook in the hospitality context and found that the same marketing strategies can be used for both social media networks. To satisfy hotel guests, they reported, “a hotel should make its social media pages more interesting, appealing, informative, interactive, and consumer centric so the customers can enjoy their social media experiences” (Leung *et al.*, 2015, p. 165).

Gamboa and Gonçalves (2014) explored customer loyalty to a retail fashion brand through social media networks and found that loyalty, especially for followers, can be ensured through trust, customer satisfaction, perceived value, and commitment. They furthermore revealed that increased customer loyalty and satisfaction are two chief benefits for companies that engage in social media activities. Furthermore, Ramsaran–Fowder and Fowder (2013) revealed that other organizational benefits include reduced marketing costs, personalization, and value co-creation. At the same time, Özgen and Kozak (2015, p. 229) showed that hotels consider social media to represent an “ocean of opportunity that is highly related to service quality, reliable information channels and effective tools to monitor competitors and for undertaking self-review of performance.” Such findings are in conjunction with the creation of effective dialogues with guests and the analysis of big data (Goldenberg, 2015), both of which are important for today’s social media strategies, though that trend does not seem to have changed since the last decade.

Gaur and Waheed (2003) examined motivations of businesses to engage in interactive technologies in India and revealed that such motivations varied from industry to industry. Within the hotel context, they concluded that establishing customer loyalty ranks among the greatest motivations for a hotel to engage in social media strategies, closely followed by the reduction in marketing costs and the creation of databases with relevant information about guests. From another angle, Lin and Lu (2011) studied the motivations of users who engage social media and revealed that the desire for enjoyable activities, need for information, and expansion of social networks are all reasons to use social media networks. By contrast, Cohen and Chapman (2014) showed a different side of social media trends by focusing on the threat posed by negative reviews, which hold far greater weight than positive ones for most users. In particular, luxury hotels, which depend on positive reviews about their high service standards, can greatly suffer from low scores (Cohen and Chapman, 2014). All of those examples highlight the importance and strengths of social media networks for the hospitality industry.

Antecedents of continued use

Theoretically, continued use relates to the postadoption behavior of consumers, particularly their intentions to use technology after initially adopting and accepting it (Chang, 2013). Among the numerous theories of the adoption of technology, the most prominent are the theory of reasoned action (Fishbein and Ajzen, 1975) and the slightly different theory of planned behavior (Ajzen, 1985); however, Mathieson (1991) revealed that neither of those is entirely appropriate for exploring behavioral intentions to use technologies, given their focus on the social aspect of adoption. Considering that, in the early 1990s, technology was mostly used in the workplace, Davis’s (1989) technology acceptance model became the most widely accepted adoption theory, given its focus on the perceived usefulness and ease of use of technology. Venkatesh *et al.* (2003) later introduced the unified theory of acceptance and use of technology, which combined adoption theories proposed earlier. In sum, the mentioned theories explore users’ behavioral intentions to use a new technology, which Chuttur (2009) argued is a major limitation because actual use should not be deemed the end goal for organizations when it comes to users. Instead, the continued use of technology should be prioritized, since it provides important implications for future success.

Hong *et al.* (2006) confirmed that exploring customers’ intentions to continue using technology is a crucial part of retaining existing customers and maintaining profitability. By extension, many

other scholars have examined the adoption of technology in order to assess users' behavioral intentions to use IT (e.g., Ayeh *et al.*, 2013a; Kim *et al.*, 2008b). At the same time, however, scholars have raised questions about whether the criteria for IT adoption are the same as those of continued IT use and called for more research on the determinant structure of the behavior of IT use (Hong *et al.*, 2006, p. 1820). The determinants that influence the continued use of technology largely depend on the context of study, however (Chang, 2013). For instance, in the transportation context, Jen and Hu (2003) explored that bus passengers' repurchase intentions were determined by service value and the attractiveness of alternatives. The importance of perceived functionality, interface design, and system support for intended continued use also found support in the e-learning context (Cho *et al.*, 2009). In that same context, Lwoga and Komba (2015) investigated the effects of performance and effort expectancy, facilitating conditions, social influence, and self-efficacy on the continued use of an e-learning system. Meanwhile, Wangpipatwong *et al.* (2008) confirmed the importance of self-efficacy for the continued use of technology in the context of e-governance. Overall, those studies have clearly shown differences in antecedents of continued use based on the context of study. However, little research has been conducted on the antecedents of the continued use of social media in the context of the hotel industry.

Model development and hypotheses

Relationship among interaction and trust, perceived benefits, and enjoyment

Amid increased interest in the importance of interaction due to Web 2.0 developments (Lee, 2005), interaction, which involves interpersonal communication and social media networks, has been highlighted as a prime example of how user-generated content builds a foundation of user-user and company-user interaction (Venkatesh and Davis, 2000). On that topic, Wang and Chiang (2009, p. 470) revealed that "trusting relationships generally result from strong, symmetrical interaction ties" and found that interaction bears a strong impact on trust in the e-auction context.

The importance of interaction on social media was confirmed early on by Baird and Parasnis (2011) and Kaplan and Haenlein (2010) revealed that businesses should be less talking to customers, but more talking with them. Rapp *et al.* (2013) pointed out that a chief advantage of social media networks is their facilitation of communication and interaction with users in order to co-create value. Kaplan and Haenlein (2010) additionally reported that businesses should create interesting content in order to foster engagement and interaction with customers. Lin *et al.* (2014, p. 198) explored a similar construct regarding social media that they termed *connectedness*, defined as "the degree to which a [social media network] helps users stay connected and maintain social relationships and ties," and found that it influenced the satisfaction of using social media networks and the sense of belonging among users. However, those authors did not explore the effect on any other construct.

Although few studies have positioned interaction as an external variable, the construct is expected to gain importance with the continued development of user-generated content, which becomes more social and accessible anywhere and at any time (tom Dieck *et al.*, 2017). According to Brashear *et al.* (2003, p. 191), "The influence of interaction on trust development tends to be based on relational factors that develop from interactions where respect and concern are clearly demonstrated." Considering the importance of interaction as a crucial component of

social media networks and scholars' confirmations that interaction influences behaviors such as trust (Bove and Johnson, 2000; Brashear *et al.*, 2003), perceived benefits (Terwel *et al.*, 2009) and enjoyment (Yang, 2013), the following hypotheses were proposed:

H1a: Interaction on social media networks positively affects trust.

H1b: Interaction on social media networks positively affects perceived benefits.

H1c: Interaction on social media networks positively affects perceived enjoyment.

Relationship among ubiquity and trust, perceived benefits, and enjoyment

Ubiquity is considered to be immensely important as part of the latest technological developments, for consumers expect to engage with businesses and other users on a frequent, instantaneous basis (Okazaki and Mendez, 2013). As a consequence of the wide applicability of mobile devices, businesses can reach customers at any time, while customers can simultaneously access information whenever they want regardless of their location (Kim *et al.*, 2008b). Such abilities refer to the concept of ubiquity, the importance of which a recent study revealed in building and sustaining loyal relationships (Kim *et al.*, 2016).

Of course, terms for *ubiquity* within different contexts differ. For instance, Kim and Shin (2015), in examining the context of wearable devices, found that mobility influences the adoption of technology. That finding aligns with the result of a study by Huang *et al.* (2007, p. 595), who found that mobility influences mobile learning because it enables individuals to access material whenever required and thus that “advantages of mobility are crucial to users” and need to be explored in contexts related to mobile technologies. Using a different term, but referring to the same concept, tom Dieck *et al.* (2017) revealed a limited focus on accessibility, defined as using technology anywhere and at any time, within the context of tourism and called for further research that uses that external dimension. In the hotel industry, the potential of retrieving hotel-related information easily at any time and anywhere provides guests with a higher degree of power. Okazaki and Mendez (2013) acknowledged the importance of ubiquity within the industry, yet revealed that researchers have hardly measured its effect on behavioral intentions.

One study that focused on ubiquity was Okazaki *et al.*'s (2012), which examined the negative effect of ubiquity on trust in terms of mobile marketing and reported that the potential to constantly receive marketing material negatively influenced trustworthiness. Zhou (2012) suggested a negative influence of ubiquity on trust due to a certain degree of vulnerability in terms of security associated with ubiquity; however, that study also supported a positive effect of ubiquity on trust. Within the context of mobile services, Tojib and Tsarenko (2012) confirmed a strong effect of ubiquity on enjoyment. Nevertheless, since studies assessing the impact of ubiquity on perceived benefits remains scarce, this study proposed the following hypotheses:

H2a: Ubiquity positively affects trust in social media.

H2b: Ubiquity positively affects perceived benefits of social media.

H2c: Ubiquity positively affects perceived enjoyment of social media.

Relationship among trust and continued use of social media

Research on the adoption of social media has highlighted two ways of defining *trust*. One approximates trust more closely with trustworthiness, which links to data privacy and security

(Rauniar *et al.*, 2014), whereas the other relates trust to perceived trust. This study adopts that second definition. According to Pentina *et al.* (2013, p. 1547), *trust* is “a willingness to rely on an exchange partner in whom one has confidence.” In the context of social media, that definition does not necessarily have to refer to a company, but can also refer to trust in another consumer or user. Thus, in the present context, trust relates to honest, true comments by fellow social media users as well as by hotels themselves, which relates to the portrayal of actuality on social media. Given the intangible nature of the hospitality industry, trust is considered to be highly important, for hotel guests tend to read online reviews on social media networks in order to receive firsthand reviews by previous guests to minimize uncertainty (Ayeh *et al.*, 2013a). Investigating the context of e-auctions, Wang and Chiang (2009) detected the strong impact of trust on the intention to continuously use auction service. By extension, the following hypothesis was proposed:

H3: Trust positively affects the continued use of social media.

Relationship between perceived benefits and continued use of social media

In the context of blogging, *perceived benefits* was defined as “the degree to which a person believed he or she could obtain mutual benefits through knowledge sharing” (Hsu and Lin, 2008, p. 68). Blogs are similar to social media, for users participate in order to receive or share content; consequently, users assumably aim to receive benefits as a result of following social media pages. That idea was confirmed by Dagger and O’Brien (2010), who observed direct correlations between offering consumers benefits and loyalty that emerged as a result. However, few studies have incorporated the dimension of perceived benefits in studies of the adoption of technology (Hsu and Lin, 2008; Kim *et al.*, 2008a; Lopez–Nicolas *et al.*, 2008). That trend is surprising given that tom Dieck *et al.* (2017) revealed that users’ motivation to engage with social media is highly influenced by whether they receive discounts or coupons. That idea received additional support from Kim *et al.* (2008a), who confirmed that both perceived benefits and trust influenced individuals’ intention to use online services. Thus, the following hypothesis was proposed:

H4: Perceived benefits positively affect the continued use of social media.

Relationship between perceived enjoyment and continued use of social media

The same logic described above applies to the dimension of perceived enjoyment, which researchers (Ayeh *et al.*, 2013b; Lin and Lu, 2011; van der Heijden, 2004) linked to the intention to use online services. *Enjoyment* has been defined by Shin (2010, p. 480) as “the extent to which the activity of using a computer system is perceived to be personally enjoyable in its own right aside from the instrumental value of the technology.” According to Lee and Chang (2011), enjoyment as an external dimension of the acceptance of technology is particularly valuable in the voluntary environment of social media networks in which users spend their leisure time. In fact, Praveena and Thomas (2014, p. 27) investigated the intention to continue to use Facebook and found that it was primarily “a hedonic website” on which “enjoyment rules more than the other factors.” Another example comes from Lin and Lu (2011), who found support for the great effect of perceived enjoyment on the intention to continue to use social media networks and concluded that businesses need to “continue developing applications and small games with novel, pleasurable experiences to reinforce pleasurable effects in using the site and further to strengthen its stickiness” (Lin and Lu, 2011, p. 1159). Thus, the following hypothesis was proposed:

H5: Perceived enjoyment positively affects the continued use of social media.

The final proposed model for this study appears in Figure 1.

Please insert Figure 1 here.

Methods

Sample and data collection

This study used surveys for primary data collection. The sampling units were domestic hotel guests who follow four- and five-star hotels' social media network pages in the United Kingdom. It was crucial to reach social media users who already followed a hotel on a social media network in order to explore the factors that influence intentions to continue to use the media. An online link to a questionnaire was posted by 10 four- and five-star UK hotels from May 15 to September 18, 2013, on their Facebook and Twitter pages, which yielded 258 usable samples from hotel guests. The 10 hotels that agreed to participate in this study were selected from *AA Hotel Guide*, which included 84 five-star hotels and 648 four-star hotels, for a total of 732 hotels. Each hotel was contacted via e-mail and asked to participate. After several rounds of contact with increasingly fewer hotels, 10 hotels agreed to participate by posting the questionnaire on their social media pages. To ensure that only users responded to the questionnaire that already follow the hotel on the social media network, a selective question was incorporated inquiring about the lengths of following the hotel on social media networks. Only those users that indicated that they are actual followers of the hotel were considered as part of the sample for this study.

Instrument development

The questionnaire consisted of two sections; the first aimed to gather demographic information, whereas the second focused on the six constructs. Each construct was measured by three to six measurement items adapted from previous studies (Table 1). Participants were asked to rank the measurement items on a 5-point Likert scale (1 = *Strongly disagree*, 3 = *Neutral*, 5 = *Strongly agree*).

Analytical methods

To analyze the data, SmartPLS 2.0 was used. Partial least squares (PLS) is a powerful structural equation model used widely in theory testing and confirmation (Chin *et al.*, 1996). It is also an appropriate approach for examining whether relationships might exist and thus is useful in suggesting propositions for later testing (Chung *et al.*, 2014).

The concepts of interaction and ubiquity are fairly new in exploratory research on social media. Therefore, one of the primary research goals was to check the predictive power of two social media characteristics—interaction and ubiquity—and how they influence hotel guests' continued use of social media networks through the mediating variables of trust, benefits, and enjoyment. Thus, in situations in which theory is less developed and the primary objective is not theory confirmation, PLS is the preferred method (Hair *et al.*, 2011).

Please insert Table 1 here.

Results

Sample characteristics

The vast majority of respondents (73.3%) were women (Table 2). Respondents were distributed across all ages, although most were 25–54 years old. In terms of highest level of education achieved, respondents demonstrated a wide spread, though the greatest percentage had an undergraduate degree (29.5%). The majority of respondents were either married (46.5%) or single (43.4%), and 51.2% of the respondents were employed full-time. The amount of years of experience with following hotels on social media networks was equally distributed, from less than 6 months (26.0%) to more than 3 years (15.1%).

Please insert Table 2 here.

Instrument validation

To confirm the reliability and validity of the model, convergent and discriminant validity was assessed. As Tables 3 and 4 show, all measures were robust in terms of their reliability, since all standardized loadings were statistically significant—that is, greater than the minimal threshold of 0.50 (Hair *et al.*, 2011). Cronbach's α for all constructs exceeded the minimal threshold of 0.70 (Hair *et al.*, 2011), and the composite reliabilities ranging from 0.858 to 0.938 also exceeded the recommended threshold value of 0.70 (Gefen *et al.*, 2003). Lastly, the average variance extracted (AVE) for each construct was greater than 0.5 (Fornell and Larcker, 1981), in the range of 0.645–0.801. Those results indicated that the convergent validity of the model was adequate.

Discriminant validity was assessed based on Gefen and Straub's (2005) guidelines for examining whether a construct is more strongly related to its own measures than with any other construct. We executed that process by examining item loadings to construct correlations and investigating the overlap in variance by comparing the AVE of each construct and the squared correlations among constructs (Chin *et al.*, 1996). Table 3 depicts the cross-loadings of each construct, and Table 4 shows correlations among constructs, in which the diagonal elements represent the square roots of AVEs. As the table shows, the square root of each construct's AVE was greater than its correlations with any other construct. As such, the adequate discriminant validity of the model was supported.

Please insert Table 3 here.

Please insert Table 4 here.

Hypothesis testing

The proposed model was examined for explanatory power and path significance using a bootstrapping technique. A nonparametric bootstrapping procedure with 500 resamples was performed during PLS analyses, the results of which appear in Figure 2. Trust was predicted by interaction ($\beta = 0.248$, $p < .001$) and ubiquity ($\beta = 0.345$, $p < .001$), which explained 22.8% of trust variance. Hence, H₁ and H₂ found support. Meanwhile, perceived benefits were predicted by interaction ($\beta = 0.236$, $p < .001$) and ubiquity ($\beta = 0.351$, $p < .001$), which explained 22.5% of perceived benefit variance, which supported H₃ and H₄. Perceived enjoyment was predicted by interaction ($\beta = 0.302$, $p < .001$) and ubiquity ($\beta = 0.315$, $p < .001$), which explained 24.4% of

perceived enjoyment variance and thus supported H₅ and H₆. In turn, continued use of social media was predicted by trust ($\beta = 0.277, p < .001$), perceived benefits ($\beta = 0.325, p < .001$), and perceived enjoyment ($\beta = 0.238, p < .001$), which explained 44.8% of continued use of social media. As a result, H₇, H₈, and H₉ all found support.

Please insert Figure 2 here.

To analyze the model's validity, the Stone–Geisser criterion (Q^2) as the indicator for predictive relevance based on a blindfolding procedure was calculated. A value of Q^2 greater than 0 suggests predictive model relevance, whereas a value less than 0 suggests a lack of relevance. In this study's model, all endogenous constructs had a positive Q^2 , which indicates its predictive relevance (Fornell and Larcker, 1981; Hair *et al.*, 2012; Stone, 1974). In addition, Cohen's f^2 to determine each path's effect size was assessed, for which a value of 0.02 indicates a small effect size, 0.15 a medium one, and 0.35 a large one (Cohen, 1988; Hair *et al.*, 2012). As Table 5 shows, all results had at least a small effect size.

Please insert Table 5 here.

Note that the total effect of interaction ($\beta = 0.217, p < .001$) and ubiquity ($\beta = 0.285, p < .001$) were significant but relatively less than the direct effect on trust, perceived benefit, and perceived enjoyment. Such results indicate that the proposed model that did not consider direct effects among interaction, ubiquity, and continued use explained the continued use of social media better than the alternative model.

Discussion and Conclusion

Discussion

This study examined the antecedents of the continued use of social media by hotel guests. The results of data analysis revealed that both interaction and ubiquity exert strong effects on trust, perceived benefits, and perceived enjoyment with hotels' social media pages. More importantly, the results confirmed that trust, benefits, and enjoyment mediate the relationship among interaction, ubiquity, and continued use of social media. The findings also suggest that the concept of interacting with hotel guests anywhere and at any time pose important implications for hotel guests' trust regarding hotels' social media presence, the perceived benefits that they gain, and their enjoyment in engaging online with the hotel. All of those aspects strongly affect the intention to continue to use of social media among hotel guests.

Those findings are new to the body of hotel social media research and contribute to knowledge about the antecedents of continued IT use, largely because the study is among the first to examine the effect of interaction and ubiquity in the context of hotel social media. In fact, research on continued use of social media in various contexts has thus far supported the importance of either ubiquity (Kim *et al.*, 2008b; Kim *et al.*, 2016; tom Dieck *et al.*, 2017) or interaction (Bove and Johnson, 2000; Brashear *et al.*, 2003; Terwel *et al.*, 2009; Yang, 2013). However, no research has explored the importance of both constructs in the hospitality industry. Considering the immense importance of engaging with customers anywhere and at any time in order to form long-lasting relationships (Baird and Parasnis, 2011), a model that incorporates ubiquity and interaction into research on the adoption of technology thus contributes

significantly to literature on the topic in the hospitality industry. Furthermore, the study sheds new light on hotel marketing by considering the influence of interaction and ubiquity on trust, perceived benefits, and perceived enjoyment. Especially given the increasingly important concept of accessibility at any time and in any place, hotels have to be aware of the opportunities of engaging with their guests on social media. In terms of trust, hotels have to be honest and trustworthy in order to ensure that guests continue to follow them on social media; however, comments from other guests are also received as truthful, trustworthy reviews and thus deemed immensely important in the intangible hotel industry (Ayeh *et al.*, 2013a). Concerning perceived benefits, hotel guests expect special information and offers if they follow hotels on social media networks, a finding that previous research has supported with evidence that hotel guests expect benefits for their continued loyalty and support (Baird and Parasnis, 2011). Lastly, hotel guests confirmed that social media networks should be enjoyable, pleasant, fun, pleasurable, and exciting in order to encourage their continued use. That result takes support from Lin and Lu's (2011) study, which underscored that companies need to offer enjoyable content and activities to ensure that customers remain loyal.

Theoretical implications

The purpose of the present study was to investigate the antecedents of the continued use of social media among UK luxury hotel guests. The study was unique because it examined the characteristics of social media from two different aspects—interaction and ubiquity—which have not previously been examined in the context of hotel social media. However, especially in light of today's technological developments, including mobile and even wearable devices, ubiquity and interaction have become increasingly important (Kim *et al.*, 2008b; Lee, 2005). Our findings confirmed that trend by showing that interaction and ubiquity are important determinants of the continued use of social media among UK luxury hotel guests through the mediating effects of trust, benefits, and enjoyment. Concerning the development of theory, the results could contribute to deepening and broadening the effect of interaction and ubiquity as antecedents of continued use. According to Rauschnabel *et al.* (2017) and tom Dieck and Jung (2015), adoption research often misses to incorporate context-specific factors and the present study found two new antecedents of social media adoption that should be included in future user generated media acceptance studies.

Practical implications

The present study's findings also pose some practical implications. For one, they showed that two characteristics of social media—interaction and ubiquity—were key antecedents of hotel guests' continued use of hotels' social media networks through the mediating variables of trust, benefits, and enjoyment. For hotel marketing professionals, such findings provide important implications for the increased importance of mobile devices, smartphones, tablets, and wearable technology. The possibility of interacting with other users and businesses at any time and anywhere provides hotel guests with enhanced power, and as such, marketing managers need to provide trustworthy, beneficial, enjoyable content in order to encourage guests to share information and spread positive word-of-mouth.

Our results also demonstrate that trust in the comments and information provided by other hotel guests and hotels themselves, perceived benefits (e.g., special offers, special information, overall communication benefits), and perceived enjoyment mediate the relationship among the

characteristics of social media of interaction and ubiquity, as well as hotel guests' continued use of hotels' social media. For hotel marketing practitioners, the findings provide important implications for the formulation and implementation of marketing strategies. As the results demonstrate, the creation of competition, which in turn creates value for guests, can prompt intentions of continued use, and hotel managers should therefore create a good mix of trustworthy, valuable, and enjoyable content that guests can spread in order to reach existing and new customers. Using social media networks to interact with hotel guests and facilitate interaction among them at any time and anywhere is an important component for future marketing strategies; however, to ensure loyalty, hotels have to be aware of the importance of trustworthiness, perceived benefits, and enjoyment. To become effective, social media marketing in the hotel context should focus on the five key areas of the confirmed model.

Lastly, hotel social media marketing managers should pay close attention to the content design on social media networks in order to accommodate the increased importance of ubiquity and interaction. Since interaction relates to the sharing of content, managers are advised to create interesting and enjoyable posts that are more likely to be shared among a wide network of potential customers. That suggestion is particularly applicable considering the importance of pictures and the increased likelihood of consumers to like and share a post as a result of pleasant pictures that trigger an emotional response and expectations to visit. That idea links nicely to trust and consumers' certainty that posted images are honest and not simply altered in Photoshop. Consequently, this study has also shown the importance of content design, creating honest (*Trust*), and pointed messages that are easily read on mobile phones (*Ubiquity*), likely to be shared (*Interaction*) through enjoyable (*Enjoyment*) and beneficial (*Perceived benefits*) information.

Limitations and future research

Among the limitations of the present study, data were collected only from domestic guests of four- and five-star hotels in the United Kingdom, which complicates the generalizability of the findings to other contexts. In response to that limitation, further research could be conducted in different countries to take cultural factors into account. Furthermore, the research model does not consider moderating factors (e.g., experience, gender, age), and therefore future research should investigate the moderating effect of such variables in order to enhance the applicability of the findings. Using a sample with more than 258 hotel guests could aid the generalizability of the findings and thus strengthen them. Further research could also be conducted to compare the findings among different hotel segments—for instance, non-four- or five-star hotels (e.g., budget hotels) in the United Kingdom. Another limitation was that the sampling technique targeted existing followers of hotels' social media pages, who arguably had already decided to continue to follow hotels online. Nonetheless, since the study aimed to explore continued use instead of the intention to use, it was crucial to gather data from current social media followers. Lastly, user generated media and specifically social media networks are changing rapidly thus, considering the importance of context-specific factors as part of technology adoption research, further research is required. The integration of content such as 360 degree images into hotel's social media marketing practices is expected to transform the social media experience even more which is expected to influence the acceptance behavior. Future research is advised to look into these developments to explore and test new factors of social media adoption. In sum, this study investigated the continued use of social media networks within the hotel industry. Findings

showed that continued use of those media is driven by interaction and ubiquity and mediated by trust, enjoyment, and perceived benefits. Ultimately, it is hoped that this study inspires future research on intentions of continued use of current technologies in the context of hospitality and tourism.

References

- Agudo-Peregrina, Á. F., Hernández-García, Á. and Pascual-Miguel, F. J. (2014), "Behavioral intention, use behavior and the acceptance of electronic learning systems: Differences between higher education and lifelong learning". *Computers in Human Behavior*, Vol. 34, pp. 301-314.
- Ajzen, I. (1985), "From intentions to actions: A theory of planned behaviour", In Kuhl, J. and Beckman, J (Eds.), *Action-control: From cognition to behaviour*. Springer, Heidelberg, pp. 11-39.
- Ayeh, J., Au, N. and Law, R. (2013a), "Towards an understanding of online travelers' acceptance of consumer -generated media for travel planning: Integrating technology acceptance and source credibility factors", in Cantoni, L. and Xiang, SZ. (Eds.), *Information and Communication Technologies in Tourism 2013*. Springer, Heidelberg, pp. 254-267.
- Ayeh, J. Au, N. and Law, R. (2013b), "Predicting the intention to use consumer-generated media for travel planning", *Tourism Management*, Vol. 35, pp. 132-143.
- Baird, C. and Parasnis, G. (2011), "From social media to social customer relationship management", *Strategy & Leadership*, Vol. 39 No. 5, pp. 30-37.
- Berezina, K., Bilgihan, A., Cobanoglu, C. and Okumus, F. (2016), "Understanding satisfied and dissatisfied hotel customers: text mining of online hotel reviews", *Journal of Hospitality Marketing & Management*, Vol. 25 No. 1, pp. 1-24.
- Bove, L.L. and Johnson, L.W. (2000), "A customer-service worker relationship model", *International Journal of Service Industries Management*, Vol. 11 No. 5, pp. 491-511.
- Brashear, T. G., Boles, J. S., Bellenger, D. N. and Brooks, C. M. (2003), "An empirical test of trust-building processes and outcomes in sales manager-salesperson relationships", *Journal of the Academy of Marketing Science*, Vol. 31 No. 2, pp. 189-200.
- Chang, C. C. (2013), "Examining users' intention to continue using social network games: A flow experience perspective". *Telematics and Informatics*, Vol. 30 No. 4, pp. 311-321.
- Chin, W. W., Marcolin, B. L. and Newsted, P. R. (1996), "A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and Voice Mail Emotion/Adoption Study", in DeGross, J. I., Jarvenpaa, S. and Srinivasan, A. (Eds.), *Proceedings of the Seventeenth International Conference on Information Systems*, Cleveland, pp. 21-41.
- Cho, V., Cheng, T. E. and Lai, W. J. (2009), "The role of perceived user-interface design in continued usage intention of self-paced e-learning tools". *Computers & Education*, Vol. 53 No. 2, pp. 216-227.
- Chung, N., Koo, C. and Kim, J. K. (2014), "Extrinsic and intrinsic motivation for using a booth recommender system service on exhibition attendees' unplanned visit behaviour", *Computers in Human Behavior*, Vol. 30, pp. 59-68.
- Chung, N., Lee, H., Lee, S. J. and Koo, C. (2015), "The influence of tourism website on tourists' behavior to determine destination selection: A case study of creative economy in Korea", *Technological Forecasting and Social Change*, Vol. 96, pp.130-143.
- Chuttur, M. (2009), "Overview of the technology acceptance model: Origins, developments and

- future directions”, *Sprouts: Working Papers on Information Systems*, Vol. 9 No. 37, pp.1-23.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*. Lawrence Erlbaum Associates, 2nd ed, Hillsdale.
- Cohen, C. and Chapman, A. (2014), “Social Media Strategy And Online Brand Reputation The Luxury Hospitality Case”, In L. Robinson (Ed.). *Marketing Dynamism & Sustainability: Things Change, Things Stay the Same* (pp. 303-306). Houston, USA, Springer.
- Dagger, T. S. and O'Brien, T. K. (2010), “Does experience matter? Differences in relationship benefits, satisfaction, trust, commitment and loyalty for novice and experienced service users”, *European Journal of Marketing*, Vol. 44 No. 9/10, pp. 1528-1552.
- Davis, F. (1989), “Perceived usefulness, perceived ease of use, and user acceptance of information technology”, *MIS Quarterly*, Vol. 13, pp. 319-340.
- Escobar-Rodríguez, T. and Carvajal-Trujillo, E. (2014), “Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model,” *Tourism Management*, Vol. 43, pp. 70-88.
- Fishbein, M. and Ajzen, I. (1975), *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA, Addison-Wesley.
- Fornell C. and Larcker D. (1981), “Evaluating structural equation models with unobservable variables and measurement error”. *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Fotis, J., Buhalis, D. and Rossides, N. (2012), “Social media use and impact during the holiday travel planning process”, in Fuchs, M. Ricci, F. and Cantoni, L (Eds.), *Information and Communication Technologies in Tourism 2012*, Springer, Vienna, pp. 13-24.
- Gamboa, A. M. and Gonçalves, H. M. (2014), “Customer loyalty through social networks: Lessons from Zara on Facebook”, *Business Horizons*, Vol. 57 No. 6, pp. 709-717.
- Gaur, S.S. and Waheed, K.A. (2003), “Motivations to use interactive technologies in marketing: a study in Indian service businesses”, *Journal of Service Research*, Vol. 3 No. 1, pp. 45-60.
- Gefen, D., Karahanna, E. and Straub, D. W. (2003), “Trust and TAM in Online Shopping: An integrated model”. *MIS Quarterly*, Vol. 27 No. 1, pp. 51-90.
- Gefen, D. and Straub, D. W. (2005), “A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example”. *Communications of the Association for Information System*, Vol. 16, pp. 91-109.
- Goldenberg, B. (2015). *The Definitive Guide to Social CRM: Maximizing Customer Relationships with Social Media to Gain Market Insights, Customers, and Profits*. Pearson Education.
- Greenberg, P. (2010). "The impact of CRM 2.0 on customer insight." *Journal of Business & Industrial Marketing*, 25(6): 410-419.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011), "PLS-SEM: Indeed a Silver Bullet", *Journal of Marketing Theory and Practice*, Vol.19, No.2 , pp. 139–151.
- Hair, J. F., Sarstedt, M., Ringle, C. M. and Mena, J. A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40, pp.414-433.
- Hong, S., Thong, J. Y. and Tam, K. Y. (2006), “Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet”. *Decision support systems*, Vol. 42, No. 3, pp. 1819-1834.
- Hsu, C. and Lin, J. (2008), “Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation”, *Information and Management*, Vol. 45, pp. 65-74.

- Huang, J. H., Lin, Y. R. and Chuang, S. T. (2007), "Elucidating user behavior of mobile learning: A perspective of the extended technology acceptance model", *The Electronic Library*, Vol. 25 No. 5, pp. 585-598.
- Hudson, S. and Thal, K. (2013), "The Impact of Social Media on the Consumer Decision Process: Implications for Tourism Marketing". *Journal of Travel & Tourism Marketing*, Vol. 30, pp. 156-160.
- Jen, W. and Hu, K. C. (2003), "Application of perceived value model to identify factors affecting passengers' repurchase intentions on city bus: A case of the Taipei metropolitan area". *Transportation*, Vol. 30 No. 3, pp. 307-327.
- Jung, T., Ineson, E. and Green, E. (2013), "Online Social Networking: Relationship Marketing in UK Hotels", *Journal of Marketing Management*. Vol. 29, No. 3-4, pp. 393-420.
- Kaplan, A. and Haenlein, M. (2010), "Users of the world, unite! The challenges and opportunities of Social Media". *Business Horizons*, Vol. 53, pp. 59-68.
- Kim, A. J. and Ko, E. (2012), "Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand", *Journal of Business Research*, Vol. 65 No. 10, pp. 1480-1486.
- Kim, S., Baek, T. H., Kim, Y. K. and Yoo, K. (2016), "Factors affecting stickiness and word of mouth in mobile applications". *Journal of Research in Interactive Marketing*, Vol. 10 No. 3, pp. 177-192.
- Kim, D. J., Ferrin, D. L. and Rao, H. R. (2008a), "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents". *Decision support systems*, Vol. 44 No. 2, pp. 544-564.
- Kim, D., Park, J. and Morrison, A. (2008b), "A model of traveller acceptance of mobile technology", *International Journal of Tourism Research*, Vol. 10 No. 5, pp. 393-407.
- Kim, H., Lee, I. and Kim, J. (2008c), "Maintaining continuers vs. converting discontinuers: relative importance of post-adoption factors for mobile data services". *International Journal of Mobile Communications*, Vol. 6 No. 1, pp. 108-132.
- Kim, H. Y., Lee, J. Y., Choi, D., Wu, J. and Johnson, K. K. (2013), "Perceived benefits of retail loyalty programs: their effects on program loyalty and customer loyalty", *Journal of Relationship Marketing*, Vol. 12 No. 2, pp. 95-113.
- Kim, J. (2016), "An extended technology acceptance model in behavioral intention toward hotel tablet apps with moderating effects of gender and age". *International Journal of Contemporary Hospitality Management*, Vol. 28 No. 8, pp. 1535-1553.
- Kim, K. J. and Shin, D. H. (2015), "An acceptance model for smart watches: implications for the adoption of future wearable technology", *Internet Research*, Vol. 25 No. 4, pp. 527-541.
- King, C., Funk, D. C. and Wilkins, H. (2011), "Bridging the gap: An examination of the relative alignment of hospitality research and industry priorities". *International Journal of Hospitality Management*, Vol. 30, pp. 157-166.
- Lee, K. C., Byun, J. and Chung, N. (2015), "Understanding continued ubiquitous decision support system usage behaviour", *Telematics and Informatics*, Vol. 32, pp. 921-929.
- Lee, T. (2005), "The Impact Of Perception Of Interactivity On Customer Trust And Transaction Intentions In Mobile Commerce". *Journal of Electronic Commerce Research*, Vol. 6 No. 3, pp. 165-180.
- Lee, H. and Chang, E. (2011), "Consumer attitudes toward online mass customization: An application of extended technology acceptance model," *Journal of Computer-Mediated Communication*, Vol. 16 No. 2, pp. 171-200.

- Leung, X. Y., Bai, B. and Stahura, K. A. (2015), "The Marketing Effectiveness of Social Media in the Hotel Industry A Comparison of Facebook and Twitter". *Journal of Hospitality & Tourism Research*, Vol. 39 No. 2, pp. 147-169.
- Lin, H., Fan, W. and Chau, P. Y. (2014), "Determinants of users' continuance of social networking sites: A self-regulation perspective". *Information & Management*, Vol. 51 No. 5, pp. 595-603.
- Lin, K. Y. and Lu, H. P. (2011). "Why people use social networking sites: An empirical study integrating network externalities and motivation theory". *Computers in Human Behavior*, Vol. 27 No. 3, pp. 1152-1161.
- Liu, I. F., Chen, M. C., Sun, Y. S., Wible, D. and Kuo, C. H. (2010), "Extending the TAM model to explore the factors that affect Intention to Use an Online Learning Community". *Computers & Education*, Vol. 54 No. 2, pp. 600-610.
- Lopez-Nicolas, C., Molina-Castillo, F. and Bouwman, H. (2008), "An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models", *Information and Management*, Vol. 45 No. 6, pp. 395-364.
- Lwoga, E. T. and Komba, M. (2015), "Antecedents of continued usage intentions of web-based learning management system in Tanzania". *Education+ Training*, Vol. 57 No. 7, pp. 738-756.
- Mallat, N., Rossi, M., Tuunainen, V. K. and Öörni, A. (2009), "The impact of use context on mobile services acceptance: The case of mobile ticketing". *Information & management*, Vol. 46 No. 3, pp. 190-195.
- Mathieson, K. (1991), "Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior". *Information systems research*, Vol. 2 No. 3, pp. 173-191.
- Minazzi, R. (2015), *Social media marketing in tourism and hospitality*, Springer, Heidelberg.
- Okazaki, S. and Mendez, F. (2013), "Towards a Better Understanding of Mobile Marketing: Theoretical Construction of Ubiquity". In *Media and Convergence Management* (pp. 233-246). Springer: Berlin Heidelberg.
- Okazaki, S., Molina, F. J. and Hirose, M. (2012), "Mobile advertising avoidance: exploring the role of ubiquity". *Electronic Markets*, Vol. 22 No. 3, pp. 169-183.
- Özgen, S. H. K. and Kozak, M. (2015), "Social media practices applied by city hotels: a comparative case study from Turkey", *Worldwide Hospitality and Tourism Themes*, Vol. 7 No. 3, pp. 229-241.
- Palmer, A., McMahon-Beattie, U. and Beggs, R. (2000), "A structural analysis of hotel sector loyalty programmes". *International Journal of Contemporary Hospitality Management*, Vol. 12, pp. 54-60.
- Park, E., Baek, S., Ohm, J. and Chang, H. J. (2014), "Determinants of player acceptance of mobile social network games: An application of extended technology acceptance model". *Telematics and Informatics*, Vol. 31 No. 1, pp. 3-15.
- Pentina, I., Zhang, L. and Basmanova, O. (2013), "Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter", *Computers in Human Behavior*, Vol. 29 No. 4, pp. 1546-1555.
- Praveena, K. and Thomas S. (2014), "Continuance Intention to Use Facebook: A Study of Perceived Enjoyment and TAM," *Bonfring International Journal of Industrial Engineering and Management Science*, Vol. 4 No. 1, pp. 24-29.
- Ramsaran-Fowdar, R. R. and Fowdar, S. (2013), "The implications of Facebook marketing for

- Organizations”, *Contemporary Management Research*, Vol. 9 No. 1, pp. 73-84.
- Rapp, A., Beitelspacher, L., Grewal, D. and Hughes, D. (2013), “Understanding social media effects across seller, retailer, and consumer interactions,” *Journal of the Academy of Marketing Science*, pp. 1-20.
- Rauniar, R., Rawski, G., Yang, J. and Johnson, B. (2014), “Technology acceptance model (TAM) and social media usage: an empirical study on Facebook”, *Journal of Enterprise Information Management*, Vol. 27 No.1, pp. 6-30.
- Rauschnabel, P. A., Rossmann, A. and tom Dieck, M. C. (2017), “An Adoption Framework for Mobile Augmented Reality Games: The Case of Pokémon Go”, *Computers in Human Behavior*, Vol. 76, pp. 176-186.
- Schierz, P. G., Schilke, O. and Wirtz, B. W. (2010), “Understanding consumer acceptance of mobile payment services: An empirical analysis”. *Electronic Commerce Research and Applications*, Vol. 9 No.3, pp. 209-216.
- Schmallegger, D. and Carson, D. (2008), “Blogs in tourism: Changing approaches to information exchange.” *Journal of Vacation Marketing*, 14(2), pp. 99–110.
- Shin, D. H. (2010), “Analysis of online social networks: a cross-national study”, *Online Information Review*, Vol. 34 No. 3, pp. 473-495.
- Sigala, M. (2011), “eCRM 2.0 applications and trends: The use and perceptions of Greek tourism firms of social networks and intelligence”. *Computers in Human Behavior*, Vol. 27, pp. 655-661
- Stone, M. (1974), "Cross-Validatory Choice and Assessment of Statistical Predictions", *Journal of the Royal Statistical Society, Series B (Methodological)*, Vol. 36 No.2, pp. 111-147.
- Taylor, D. C., Barber, N.A. and Deale, C. (2015), "To tweet or not to tweet: that is the question for hoteliers: a preliminary study", *Information Technology & Tourism*, Vol. 15 No. 1, pp. 71-99.
- Terwel, B. W., Harinck, F., Ellemers, N. and Daamen, D. D. (2009), “Competence-Based and Integrity-Based Trust as Predictors of Acceptance of Carbon Dioxide Capture and Storage (CCS)”, *Risk Analysis*, Vol. 29 No. 8, pp. 1129-1140.
- Tojib, D. and Tsarenko, Y. (2012), “Post-adoption modeling of advanced mobile service use”. *Journal of Business Research*, Vol. 65 No, 7, pp. 922-928.
- tom Dieck, M. C. and Jung, T. (2015), “A theoretical model of mobile augmented reality acceptance in urban heritage tourism”, *Current Issues in Tourism*, pp. 1-21.
- tom Dieck, M.C., Jung, T., Kim, W. and Moon, Y. (2017), “Hotel guests’ social media acceptance in luxury hotels”. *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 1, pp. 530-550.
- van der Heijden, H. (2004), “User acceptance of hedonic information systems”. *MIS quarterly*, pp. 695-704.
- Venkatesh, V. and Bala, H. (2008), “Technology acceptance model 3 and a research agenda on interventions”, *Decision Sciences*, Vol. 39 No. 2, pp. 273-314.
- Venkatesh, V. and Davis, F. D. (2000), “A theoretical extension of the technology acceptance model: Four longitudinal field studies”. *Management science*, Vol. 46 No. 2, pp. 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003), “User acceptance of information technology: Toward a unified view”. *MIS quarterly*, pp. 425-478.
- Wang, J. C. and Chiang, M. J. (2009), “Social interaction and continuance intention in online auctions: A social capital perspective”. *Decision Support Systems*, Vol. 47 No. 4, pp. 466-476.

- Wangpipatwong, S., Chutimaskul, W. and Papasratorn, B. (2008), "Understanding citizen's continuance intention to use e-government website: A composite view of technology acceptance model and computer self-efficacy". *The electronic journal of e-government*, Vol. 6 No. 1, pp. 55-64.
- Wirtz, B. W., Piehler, R. and Ullrich, S. (2013), "Determinants of social media website attractiveness". *Journal of Electronic Commerce Research*, Vol. 14 No. 1, pp. 11-33.
- Yang, K. C. and Kang, Y. (2015), "Exploring Big Data and Privacy in Strategic Communication Campaigns: A Cross-Cultural Study of Mobile Social Media Users' Daily Experiences". *International Journal of Strategic Communication*, Vol. 9 No. 2, pp. 87-101.
- Yang, S. (2013), "Research on undergraduate student's adoption of mobile learning: An emerging learning mode", *Advances in Information Sciences and Service Sciences*, Vol. 5 No. 8, pp. 722-734.
- Zhou, T. (2012), "Examining mobile banking user adoption from the perspectives of trust and flow experience". *Information Technology and Management*, Vol. 13 No. 1, pp. 27-37.